Inventors: Vinegar et al. Appl. Ser. No.: 09/841,285 Atty. Dckt. No.: 5659-05700

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As used herein, "a method of treating a hydrocarbon containing formation" may be used interchangeably with "an in situ conversion process for hydrocarbons." "Hydrocarbons" are generally defined as molecules formed primarily by carbon and hydrogen atoms. Hydrocarbons may also include other elements, such as, but not limited to, halogens, metallic elements, nitrogen, oxygen, and/or sulfur. Hydrocarbons may be, but are not limited to, kerogen, bitumen, pyrobitumen, and oils. Hydrocarbons may be located within or adjacent to mineral matrices within the earth. Matrices may include, but are not limited to, sedimentary rock, sands, silicilytes, carbonates, diatomites, and other porous media.

On page 64, please delete the paragraph beginning on line 11, and substitute therefor:



As shown in FIG. 3, in addition to heat sources 100, one or more production wells 104 will typically be disposed within the portion of the hydrocarbon containing formation. Formation fluids may be produced through production well 104. Production well 104 may also include a heat source. In this manner, the formation fluids may be maintained at a selected temperature throughout production, thereby allowing more or all of the formation fluids to be produced as vapors. Therefore high temperature pumping of liquids from the production well may be reduced or substantially eliminated, which in turn decreases production costs. Providing heating at or through the production well tends to: (1) inhibit condensation and/or refluxing of production fluid when such production fluid is moving in the production well proximate to the overburden, (2) increase heat input into the formation, and/or (3) increase formation permeability at or proximate the production well.

In the Claims:

Listed below are clean copies of the amended and new claims. Marked-up copies of the amended claims are provided in an accompanying document.



1608. (amended) A method of treating a hydrocarbon containing formation in situ, comprising: providing heat from one or more beaters to at least a portion of the formation;